Appl. No. 09/653,073 Amdt. dated November 16, 2006 Reply to Office Action of August 16, 2006

REMARKS

This Amendment responds to the Office Action mailed on August 16, 2006.

The Examiner rejected claims 1-5, 10, and 13-15 under 35 U.S.C. § 102(b) as being anticipated by Birdwell et al., U.S. Patent No. 6,757,736 (hereinafter Birdwell). Birdwell discloses a server-based data distribution service by which the server receives a request for an update from one or more clients and then determines the number of clients to which the update is to be sent. Based on that number, and on certain transmission characteristics, the server of Birdwell determines whether data updates should be broadcast or delivered by point-to-point communication. Once a preferred method of transmission, either broadcast or point-to-point is selected, that particular method is carried out as to that particular group of clients. Birdwell, however, also discloses one circumstance by which the initial group of clients, who received the update by either broadcast or point-to-point communication, was not comprehensive, i.e. the group of clients to which the server sent the updates was too small. That one circumstance is that one or more clients may have been powered "off" at the time of the initial transmission, in which case neither point-to-point transmission nor a broadcast will result in the successful delivery of the update. In that instance, the server of Birdwell waits until one of the clients initially powered off turns on and makes a request for the update. Only at that point in time, does Birdwell's server recalculate whether to complete transmission by either broadcast or point-to-point based on a new group of clients to receive the update.

Independent claim 1, as amended, includes the limitations of "repeating, without waiting for a request for unreceived data from any one or more of said plurality of recipients, step (a) until a time for the completion of transferring said unreceived data by point-to-point communication with said recipients obtains a predetermined relationship to a time for the completion of said broadcasting" and "thereafter, without waiting for a request for unreceived data from any one or more of said plurality of recipients, completing said transferring of said unreceived data by point-to-point communication with at least one of said plurality of recipients." Neither of these limitations is disclosed by Birdwell, which takes no action to transfer data to a plurality of recipients, either by broadcast or point-to-point transmission, until that data is actually requested by one of the recipients that has not received it. This is because the

method of Birdwell relies upon a receipt confirmation procedure by prospective recipients through a point-to-point transmission path to determine which recipients still need the data. As noted by Birdwell, many recipients who have actually received the data may be unable to confirm receipt because the recipient was not connected to the modem. In that circumstance, the list at the server would incorrectly identify the recipient as not yet receiving the data, even though it really had. Because Birdwell recognizes that the receipt confirmation procedure in inaccurate, Birdwell teaches that a decision to re-transmit the data to the recipients still on the list as not receiving the data, whether by broadcast or point-to-point transmission, should not be made until one of the recipients on the list actually requests the data. Thus, not only does Birdwell not disclose the limitations quoted above, but it actually teaches away from them. Therefore, independent claim 1, as well as dependent claims 2-5 patentably distinguish over Birdwell and should be allowable.

Independent claim 10 has been amended to include the limitations of "repeating steps (a) through (c), without waiting for a request for unreceived data from any one or more of said plurality of recipients, until said point-to-point communication time achieves a predetermined relationship to a time required for the completion of transferring said unreceived data to said plurality of recipients by broadcasting said data" and "thereafter, without waiting for a request for unreceived data from any one or more of said plurality of recipients, completing said transferring of said unreceived data by point-to-point communication with said plurality of recipients." Therefore independent claim 10, as well as its dependent claims 13-15 patentably distinguish over Birdwell for the same reasons as independent claim 1.

Moreover, each of claims 1-5, 10, and 13-15 patentably distinguish over Birdwell for additional reasons. Assume first that the system of Birdwell begins broadcasting at a time when all clients, i.e. the plurality of recipients, are powered on and thus are capable of receiving said data by point-to-point communication. In this situation, Birdwell does not disclose completing the transfer of an update by point-to-point transmission at all; Birdwell's method assumes that the broadcast will be effective in transmitting the update to all clients, each one of which will confirm receipt, and thus none of the clients will have need to subsequently request the update, which is a precondition for another transmission attempt. Conversely, if some of the clients of Birdwell are powered off, then Birdwell fails to disclose the limitation of "completing said"

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transferring of said unreceived data by point-to-point communication with at least one of said plurality of recipients" because independent claim 1 limits the claimed "said plurality of recipients" to those capable of receiving the update by point-to-point transmission, at the time of the broadcast. Birdwell would complete transfer of the update to clients not within "said plurality of recipients." Therefore, irrespective of whether all the clients of Birdwell are powered on at the time of the broadcast, Birdwell fails to disclose the limitation of "completing said transferring of said unreceived data by point-to-point communication with at least one of said plurality of recipients."

The Examiner rejected claims 6-8, 11, 12, 16-20, and 22-24 under 35 U.S.C. § 103(a) as being obvious in view of the combination of Birdwell and Iwamura et al., U.S. Patent No. 6,396,814. Independent claim 6 includes the limitations of "designating a representative recipient" "broadcasting unreceived data units to said recipients" "repeating [the broadcast] until said representative acknowledges successful receipt of said plurality of data units" "polling at least one said recipient to identify data units not successfully received by polled ones of said plurality of recipients" and "transferring said unreceived data units by point-to-point communication." The cited combination fails to disclose or suggest the last three of the quoted limitations. Though Birdwell discloses initially broadcasting an update to a plurality of recipients, and Iwamura suggests designating a representative recipient, neither reference discloses that receipt of the update by the representative recipient be a basis for ceasing the broadcast and completing the transfer of the update by point-to-point communication to any clients that were polled and found not to receive the update. Instead, Iwamura simply designates a representative client to be a conduit by which an update transferred to the representative client by a server is retransmitted by the representative client to the other clients in its group.

Moreover, the Examiner's suggested combination shows absolutely no advantage or functionality for the representative client because the Examiner assumes that the limitation of "polling" the clients is satisfied by Birdwell's disclosure of clients contacting the server through a point-to-point channel and either requesting an update or confirming receipt of the update. Assuming, for example, that in the cited combination, Birdwell's server initially broadcasts an update to a plurality of recipients. Birdwell's server then waits until one of the clients requests

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the data again, at which point Birdwell calculates whether to communicate the data by point-to-point transmission or broadcast *based on a cost analysis*, which has nothing to do with whether the representative client is one of the ones requesting the update that was earlier broadcast. Hence, the combination would not use the representative client's confirmation of receipt to determine whether to subsequently broadcast or communicate by a point-to-point channel. Nor would the representative client be used to retransmit the data by point-to-point communication to other clients because, if a client communicates a request for an update to the server, then a point-to-point channel between the server and the client already exists and there is no need for an intermediary "representative client."

Therefore, for the foregoing reasons, independent claim 6, as well as it dependent claims 7 and 8, is patentably distinguished over the cited combination and should be allowable.

Each of claims 11, 12, 16-20, and 20-24 includes the limitation of a "representative client" and is therefore distinguishable over the cited combination of Birdwell and Iwamura for the same reasons as is independent claim 6.

In view of the foregoing amendments and remarks, the Applicant respectfully requests reconsideration and allowance of claims 1- 20 and 22-24.

Respectfully submitted,

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